

REMARKS

1. In response to the final Office Action mailed April 8, 2008, Applicants respectfully request reconsideration. Claims 1-19 were last presented for examination. Claims 10-18 were previously withdrawn from consideration. In the outstanding office action, claims 1-9 and 19 have been rejected. By the foregoing Amendments, claims 1-19 have been cancelled and claims 20-46 have been added. Thus, upon entry of this paper, claims 20-46 will be pending in this application. Of these twenty-seven (27) claims, three (3) claims (claims 20, 30 and 40) are independent.

2. Based upon the above Amendment and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

3. Applicants acknowledge receipt of form PTO-892 listing additional references identified by the Examiner.

Election/Restriction

4. Applicants thank the Examiner for acknowledging Applicants' election of claims 1-9 and 19 in response to the Restriction Requirement mailed December 14, 2007.

5. Applicants respectfully submit that new claims 20-46 are directed to the same subject matter as previously elected Group I.

Specification

6. The Examiner has objected to Applicants' specification due to various informalities. First, the Examiner has objected to the specification because in "paragraphs [40] and [46], reference number 328 has been used to describe both 'power supply terminals' and 'platforms.'" (See, Office Action, pg. 2.) In Applicants' prior response filed September 28, 2007, Applicants requested that the Examiner replace paragraph [0048] of Applicants' published patent application with a rewritten paragraph to replace "platform 328" with "platform 326." (See, Applicants' prior response, pg. 2.) Paragraph [0048] of Applicants' published patent application

corresponds to paragraph [46] of the originally filed specification. As such, Applicants submit that the Examiner's rejection to paragraphs [0040] and [0046] are improper because Applicants have already amended the specification so that reference number 328 no longer describes both "power supply terminals" and a "platform." (*See*, Applicants' prior response, pg. 2.)

7. Second, the Examiner has objected to the specification because in "paragraphs [53] and [56], reference number 214 has been used to describe both 'screw' and 'orifice.'" (*See*, Office Action, pg. 2.) As shown above, Applicants have amended paragraph [56] of Applicants' originally filed specification to make it clear that reference number 214 does not describe the orifice.

8. Third, the Examiner has objected to the specification because in "paragraph [83], reference number 206 has been used to describe both 'cover member' and 'base member.'" (*See*, Office Action, pg. 2) As shown above, Applicants have amended paragraph [83] of Applicants' originally filed specification to make it clear that reference number 206 describes only the cover member and not the base member. As shown, the base member is described by reference number 204.

Claim rejections under 35 U.S.C. §112

9. The Examiner has rejected claims 7-9 and 19 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. First, the Examiner asserts that claims 7 and 8 are indefinite because there is insufficient antecedent basis for the limitations "said cover member" and "said base member." (*See*, Office Action, pg. 2.) Second, the Examiner asserts that claim 9 is indefinite because "it is unclear which element- the sheath, the gasket or the perimeter- overlies the speech processor." (*See*, Office Action, pgs. 2-3.) Third, the Examiner asserts that claim 19 "is indefinite in light of the specification because [in the specification] the grommet is on the cable and not [on] the case member... contrary to the claim language." (*See*, Office Action, pg. 3.) Applicants have cancelled claims 7-9 and 19 thereby rendering these rejections moot. Applicants respectfully submit that new claims 20-46 comply with the requirements of 35 U.S.C. §112.

Claim Rejections under 35 U.S.C. §102 in view of Topholm

10. The Examiner has rejected claims 1-5 and 8 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,748,093 to Topholm, (hereinafter, “Topholm”). Applicants have cancelled claims 1-19 thereby rendering these rejections moot. For the Examiner’s edification, Applicants will briefly explain why new claims 20-46 are patentable over Topholm.

Claim 20

11. Topholm is directed to improved methods for manufacturing a hearing aid which is worn in the auditory canal of a user. (*See*, Topholm, col. 1, lns. 25-32.) The hearing aid housing generated by the improved method includes a shell that is matched to the auditory canal of a user. (*See*, Topholm, col. 10, lns. 27-46.) The shell has an opening therein which is covered by a faceplate. Various components are placed inside the shell through the faceplate opening, such as a receiver, microphone, signal processor, battery, amplifier, *etc.* (*See*, Topholm, FIG. 2; col. 18, lns. 1-25.)

12. Applicants’ claim 20 is directed to an “external component of a cochlear implant hearing system.” (*See*, Applicants’ claim 20, above.) As is well known in the art, a cochlear implant receives acoustic signals and converts the received signals to an electrical stimulus that is delivered directly to the cochlea of a recipient. In contrast, an acoustic hearing aid receives an input sound signal, amplifies the signal, and acoustically presents the amplified signal to the cochlea of a user. Because Topholm is entirely directed to an acoustic hearing aid, Applicants assert that Topholm fails to anticipate or render obvious an “external component of a cochlear implant hearing system” as recited, in part, in claim 20. (*See*, Applicants’ claim 20, above.)

13. Applicants claim 20 further recites, in part, “a speech processor module comprising... one or more connectors” and “a protective case configured to interface with said one or more connectors.” (*See*, Applicants’ claim 20, above.) The Examiner has completely failed to demonstrate how the acoustic hearing aid of Topholm anticipates or renders obvious these elements of claims 20. Specifically, the Examiner has failed to demonstrate that the alleged “speech processor module” of Topholm comprises any connectors whatsoever. The Examiner has also failed to show that the alleged “protective case” of Topholm is “configured to interface” with any connectors, let alone the “one or more connectors” of the “speech processor module.”

(See, Applicants' claim 20, above.) In the Office Action, the Examiner makes the statement that the "electronic module 74 [of Topholm] is configured to be operably connected to a power supply 93." (See, Office Action, pg. 4.) However, this statement cannot justify the assertions that Topholm discloses "a speech processor module comprising... one or more connectors" and "a protective case configured to interface with said one or more connectors" because the battery is merely a component of the hearing aid, and is not equivalent to a "protective case" as recited, in part, in Applicants' claim 20, above.

14. Applicants claim 20 also recites, in part, "a protective case... wherein said speech processor module is configured to be removably mountable within said case." (See, Applicants' claim 20, above.) As noted, Topholm discloses a hearing aid housing which is matched to the auditory canal of a user. (See, Topholm, FIG. 2; col. 18, lns. 1-25.) A signal processor may be included inside the housing. (See, Topholm, FIG. 2; col. 18, lns. 1-25.) As noted by the Examiner, and as shown in FIG. 23, this signal processor is electrically connected to other components within the housing via flexible electrical wires. (See, Topholm, FIG. 23; col. 15, lns. 27-65.) The flexible wires permanently couple the signal processor to other functional components so that the signal processor may be placed in the most "suitable arrangement" within the shell of the hearing aid. (See, Topholm, col. 15, lns. 27-65.) Because the signal processor is connected via physical wire connections to various other components within the shell, Applicants assert that Topholm fails to anticipate or render obvious "wherein said speech processor module is configured to be **removably mountable** within said case" as recited, in part, in Applicants' claim 20, above. (Emphasis added.)

15. Furthermore, Applicants' claim 20 recites, in part, "when said speech processor module is not mounted in said case said speech processor module is operable as a component of a behind-the-ear (BTE) speech processing unit, and when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit." (See, Applicants' claim 20, above; emphasis added.) As noted, Topholm is directed to an acoustic hearing aid configured to be worn in the auditory canal of the user. (See, Topholm, col. 10, lns. 27-46.) Topholm completely fails to disclose that this acoustic hearing aid may be operable in any operational modes beyond that suited for in-the-ear use. As such, because Topholm discloses only in-the-ear use, Applicants assert that Topholm fails to

teach a speech processor that may be “operable as a component of a body-worn speech processing unit.” (*See*, Applicants’ claim 20, above.)

16. Therefore, for at least these reasons, Applicants assert that Topholm fails to anticipate or render obvious all elements of Applicants claim 20. As such, Applicants respectfully request that the rejection of claim 20 under 35 U.S.C. §102 in view of Topholm be reconsidered, and that it be withdrawn.

Claim Rejections under 35 U.S.C. §102 in view of Berger

17. The Examiner has rejected claims 1 and 19 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 4,347,956 to Berger, (hereinafter, “Berger”). Applicants have cancelled claims 1-19 thereby rendering these rejections moot. For the Examiner’s edification, Applicants will briefly explain why new claims 20-46 are patentable over Berger.

Claim 20

18. Berger is directed to a sheath and body harness which provides a protective holder for an acoustic hearing aid. (*See*, col. 1, lns. 36-54.) The hearing aid is placed in the holder and a cable extends from the hearing aid to a component which is designed to be worn in the ear of the user. (*See*, FIG. 7; col. 1, lns. 36-54.) As shown in FIG. 8 of Berger, the holder comprises a pouch made from “leather, or automobile vinyl. (*See*, Berger, FIG. 8; col. 2, lns. 17-42.) The hearing aid is inserted into the pouch, and the top cover is folded over to close the pouch. (*See*, Berger, FIG. 8; col. 2, lns. 17-42.) The pouch is secured to the user via neck and body straps. (*See*, Berger, FIG. 1; col. 2, lns. 17-42.)

19. Applicants’ claim 20 is directed to an “external component of a cochlear implant hearing system.” (*See*, Applicants’ claim 20, above.) As is well known in the art, a cochlear implant receives acoustic signals and converts the received signals to an electrical stimulus that is delivered directly to the cochlea of a recipient. In contrast, an acoustic hearing aid receives an input sound signal, amplifies the signal, and acoustically presents the amplified signal to the cochlea of a user. Because Berger is entirely directed to an acoustic hearing aid, Applicants assert that Berger fails to anticipate or render obvious an “external component of a cochlear implant hearing system” as recited, in part, in claim 20. (*See*, Applicants’ claim 20, above.)

20. Also, Applicants claim 20 recites, in part, “a speech processor module comprising... one or more connectors” and “a protective case configured to interface with said one or more connectors.” (*See*, Applicants’ claim 20, above.) The Examiner has completely failed to show where Berger teaches these elements of claim 20. Specifically, the Examiner has failed to show that the “speech processor module” of Berger comprises any connectors whatsoever. The Examiner has also failed to show that the “protective case” of Berger is “configured to interface” with any connectors at all, let alone the “one or more connectors” of the “speech processor module.” (*See*, Applicants’ claim 20, above.) As noted, the alleged protective case of Berger comprises leather or automobile vinyl. (*See*, Berger, col. 2, lns. 17-42.) Applicants submit that a leather or vinyl case cannot “interface” with connectors as asserted by the Examiner.

21. Furthermore, Applicants’ claim 20 recites, in part, a “when said speech processor module is not mounted in said case said speech processor module is operable as a component of a behind-the-ear (BTE) speech processing unit, and when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit.” (*See*, Applicants’ claim 20, above; emphasis added.) As noted, Berger is directed to an acoustic hearing aid configured to be worn in a pouch secured to the chest of the user. (*See*, Berger, col. 2, lns. 17-42.) Topholm completely fails to disclose that this acoustic hearing aid may be operable in more than one operational mode, let alone “as a component of a behind-the-ear (BTE) speech processing unit” **and as** “a component of a body-worn speech processing unit” as recited, in part, in claim 20. (*See*, Applicants’ claim 20, above.)

22. Therefore, for at least these reasons, Applicants assert that Berger fails to anticipate or render obvious all elements of Applicants claim 20. As such, Applicants respectfully request that the rejection of claim 20 under 35 U.S.C. §102 in view of Berger be reconsidered, and that it be withdrawn.

Claim Rejections under 35 U.S.C. §102 in view of Leedom

23. The Examiner has rejected claims 1-5 and 8 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,113,611 to Leedom, (hereinafter, “Leedom”). Applicants have cancelled claims 1-19 thereby rendering these rejections moot. For the Examiner’s edification, Applicants will briefly explain why new claims 20-46 are patentable over Leedom.

Claim 20

24. Leedom is directed to a disposable in-the-ear acoustic hearing aid. (*See*, Leedom, Abstract; col. 3, lns. 39-61.) The hearing aid is modular in design and comprises two main components: a replaceable base unit and a replaceable earmold. (*See*, Leedom, col 3, lns. 39-61.) The earmold comprises a soft material that is configured to be comfortably fit into the ear of the user. (*See*, Leedom, col. 9, lns. 4-33.) In certain embodiments, the earmold may have one or more functional components, such as a battery, therein. (*See*, Leedom, col. 9, ln. 65- col. 10, ln. 33.) The baseunit is rigid or semi-rigid structure configured to be releasably attached to the ear mold. (*See*, Leedom, col. 9, lns. 4-33.) The baseunit has one or more functional components such as a receiver, microphone, electronics, *etc*, therein. (*See*, Leedom, FIG. 3A; col. 9, ln. 65- col. 10, ln. 33.)

25. In the specific embodiments relied upon by the Examiner, the modular hearing aid comprises an integrated unit of an earmold, shell and battery. (*See*, Leedom, FIGS. 3A-3B, col. 9, ln. 65- col. 10, ln. 43.) The hearing aid further comprises a baseunit that is inserted into the shell for attachment thereto. (*See*, Leedom, col. col. 10, lns. 10-43.) The battery has contacts which mate with the baseunit. (*See*, Leedom, col. col. 10, lns. 10-43.)

26. Applicants' claim 20 is directed to an "external component of a cochlear implant hearing system." (*See*, Applicants' claim 20, above.) As is well known in the art, a cochlear implant receives acoustic signals and converts the received signals to an electrical stimulus that is delivered directly to the cochlea of a recipient. In contrast, an acoustic hearing aid receives an input sound signal, amplifies the signal, and acoustically presents the amplified signal to the cochlea of a user. Because Leedom is entirely directed to an acoustic hearing aid, Applicants assert that Leedom fails to anticipate or render obvious "external component of a cochlear implant hearing system" as recited, in part, in claim 20. (*See*, Applicants' claim 20, above.)

27. Furthermore, Applicants' claim 20 recites, in part, a "when said speech processor module is not mounted in said case said speech processor module is operable as a component of a behind-the-ear (BTE) speech processing unit, and when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit." (*See*, Applicants' claim 20, above; emphasis added.) As noted,

Leedom is directed to an acoustic hearing aid configured to be worn in the auditory canal of the user. (*See*, Leedom, col. col. 10, lns. 10-43.) Leedom completely fails to disclose that this acoustic hearing aid may be operable in any operational modes beyond that suited for in-the-ear use. As such, because Leedom discloses only in-the-ear use, Applicants assert that Leedom fails to anticipate or render obvious “when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit.” (*See*, Applicants’ claim 20, above.)

28. Therefore, for at least these reasons, Applicants assert that Leedom fails to anticipate or render obvious all elements of Applicants claim 20. As such, Applicants respectfully request that the rejection of claim 20 under 35 U.S.C. §102 in view of Leedom be reconsidered, and that it be withdrawn.

Claim Rejections under 35 U.S.C. §103

29. The Examiner has rejected claim 6 under 35 U.S.C. 103(a) as being unpatenable over Leedom. The Examiner asserts that Leedom teaches all elements of claim 6 except that “Leedom does not disclose specific types of connection elements in connection with the embodiments discussed above in the 102 rejection.” (*See*, Office Action, pg. 6.) The Examiner then asserts that it would have been obvious to incorporate the electrical pin connector arrangement disclosed in an alternative embodiment of Leedom with the embodiments of FIGS. 3A-3B used in the above 102 rejection. (*See*, Office Action, pg. 6.)

30. Furthermore, the Examiner has rejected claims 7 and 9 under 35 U.S.C. 103(a) as being unpatenable over Leedom in view of U.S. Patent No. 7,123,733 to Borowsky *et al.*, (hereinafter, “Borowsky”). The Examiner asserts that “Leedom teaches each feature of the claimed invention except for the limitation that the case prevents all fluid ingress when the cover is closed relative to the base member.” (*See*, Office Action, pg. 6.) The Examiner then asserts that Borowsky teaches a watertight film around a microphone opening, and that it would have been obvious to provide the watertight film of Borowsky in the embodiments of Leedom. (*See*, Office Action, pg. 6.)

31. Applicants have cancelled claims 1-19 thereby rendering these rejections moot.

New Claim 30

32. For at least the reasons discussed above with reference to claim 20, Applicants assert that the cited references, taken alone or in combination, fail to anticipate or render obvious all elements of Applicants' claim 30. Specifically, the art of record of record fails to anticipate or render obvious a "cochlear implant, comprising: a speech processor module... a protective case configured to interface with said one or more connectors, wherein said speech processor module is configured to be removably mountable within said case, wherein when said speech processor module is not mounted in said case said speech processor module is operable as a component of a behind-the-ear (BTE) speech processing unit, and when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit" as recited, in part, in claim 30. Therefore, for at least these reasons, Applicants assert that claim 30 is patentable over the art of record.

New Claim 40

33. For at least the reasons discussed above with reference to claim 20, Applicants assert that the cited references, taken alone or in combination, fail to anticipate or render obvious all elements of Applicants' claim 40. Specifically, the art of record of record fails to anticipate or render obvious a "method for using a cochlear implant hearing system, comprising: operating a speech processor module having a housing and processing circuitry that receives signals output by a microphone as a component of a behind-the-ear (BTE) speech processing unit; and removably mounting said speech processor module in a protective case, wherein when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit not a as a component of a BTE speech processing unit; and operating said speech processor module as a component of a BTE speech processing unit." as recited, in part, in claim 40. Therefore, for at least these reasons, Applicants assert that claim 40 is patentable over the art of record.

Dependent Claims

34. The dependent claims incorporate all the subject matter of their respective independent claims and add additional subject matter which makes them independently patentable over the art

of record. Accordingly, Applicants respectfully assert that the dependent claims are also allowable over the art of record.

Conclusion

35. In view of the foregoing, Applicants respectfully submit that this application is now in condition for allowance. A notice to this effect is respectfully requested.

36. Applicants make no admissions by not addressing any outstanding rejections or basis of rejections. Furthermore, Applicants reserve the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application. Thus, cancellations and amendments of above claims, are not to be construed as an admission regarding the patentability of any claims.

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Respectfully submitted,

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